

FIRST RECORD OF THE GENUS *ZEBRIAS*  
(PISCES: PLEURONECTIFORMES: SOLEIDAE)  
FROM THE PHILIPPINE ISLANDS, WITH THE  
DESCRIPTION OF A NEW SPECIES

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*Abstract.*—*Zebrias lucapensis* is described from two specimens trawled in Lingayen Gulf, Luzon, Philippines, and represents the first record of the soleid genus *Zebrias* from the Philippine Islands. Of the 16 previously described nominal species of *Zebrias*, the new species most closely resembles *Z. crossolepis* from coastal China. *Zebrias crossolepis* differs from the new species in number of bands on the body, size of the ocular-side pectoral fin, and relative length of the spinulated portion of the ocular-side body scales.

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The genus *Zebrias* Jordan and Snyder includes 17 nominal species of small, banded soles found throughout the Indo-West Pacific from east Africa, the Red Sea, Persian Gulf, India, Australia and Tasmania, to coastal China, Taiwan, and Japan. Chabanaud (1934) listed eight species of *Zebrias* from the coasts of Australia, India, the "Malay Archipelago," "Indo-China" and Japan. Subsequent authors (Herre and Myers 1937; Ochiai 1963, 1966; Punpoka 1964; Cheng and Chang 1965; Smith 1965; Rama Rao 1967; Talwar and Chakrapani 1967; Dor 1970; Kailola 1974; Scott 1975; Joglekar 1976; Hussain and Khan 1981; Shen and Lee 1981) have recognized from one to 11 species throughout the Indo-West Pacific, excluding the Philippine Islands. Herre (1953) and more recent authors (Murdy 1979; Rau and Rau 1980; Schroeder 1980; Fourmanoir 1981; Murdy *et al.* 1981) have not recorded *Zebrias* from the Philippine Islands.

Among collections made to assess the fish fauna of the Hundred Islands region of western Lingayen Gulf, Luzon, Philippines, were two specimens of an undescribed species of *Zebrias*, which constitute the first record of the genus from the Philippine Islands and form the basis for the following description.

#### Methods and Materials

Counts and measurements follow Hubbs and Lagler (1947) and Ochiai (1963). Standard length (SL) is used throughout and rounded to the nearest 0.5 mm. Scale terminology follows Chabanaud (1934), Ochiai (1963) and Joglekar (1976). Material is deposited in the Natural History Museum of Los Angeles County (LACM). One specimen of *Brachirus selheimi* was borrowed from the Australian Museum, Sydney (AMS).

*Zebrias lucapensis*, new species

Fig. 1

*Holotype.*—LACM 37436-6, 83.5 mm; Philippines, Lingayen Gulf, vicinity of Hundred Islands, local fisherman, trawl, 9 Mar 1978.

*Paratype*.—LACM 37436-8, 83.0 mm; collected with holotype.

*Diagnosis*.—A species of *Zebrias* that differs from *Z. zebra*, *Z. altipinnis*, *Z. fasciatus*, *Z. japonicus*, *Z. synapturoides* and *Z. maculosus* by having eyes contiguous (without interorbital space); from *Z. quagga* by lack of orbital tentacles; from *Z. craticula* and *Z. cancellata* by dorsal and anal fins not fully contiguous with caudal fin; from *Z. callizona* by number of dorsal-fin rays (82–87 in *Z. callizona*; 71–72 in *Z. lucapensis*); from *Z. annandalei*, *Z. cochinensis* and *Z. regani* by number of pored lateral line scales (102–105 in *Z. annandalei*; 90 in *Z. cochinensis*; 82–90 in *Z. regani*; 63–68 in *Z. lucapensis*); and from *Z. keralensis* and *Z. crossolepis* by total number and status (single or paired) of bands on head and body (13 single bands in *Z. keralensis*; nine paired (18) bands in *Z. crossolepis*; 16–18 mostly unpaired bands in *Z. lucapensis*).

*Description*.—(Meristics and morphometrics for the paratype are indicated in parentheses when differing from holotype.) Dorsal-fin rays 72 (71); anal-fin rays 56; pectoral-fin rays 11, 11; pelvic-fin rays 5, 4 (5, 5); caudal-fin rays 18; lateral line scales 63 (68); vertebrae 9 + 34 = 43. Body depth 2.70 (2.72) in SL; head length (HL) 4.64 (4.88) in SL; caudal length 3.63 (3.60) in SL; upper eye diameter 4.25 (4.59) in HL; pectoral length 6.9, 6.0 (6.25, 5.14) in HL.

Eyes contiguous, upper eye slightly in advance of the lower; no interorbital scales; orbital tentacles absent. Anterior nostril on ocular side with long tube reaching to anterior margin of lower eye when depressed; posterior nostril on ocular side with a short tube, not reaching lower eye; nostrils on blind side inconspicuous. Mouth subterminal, gape extending to vertical through center of lower eye; teeth small, in bands, present only at rear of upper and lower jaws on blind side. Blind side of head with small papillae anteriorly. Opercular margins fringed with minute tentacles.

Scales strongly ctenoid on both sides, those of ocular side with 8 to 15 marginal spinules and 5 to 11 basal grooves, those of blind side with 12 to 16 marginal spinules and 9 to 13 basal grooves; spinulated portion of scale 33–40% of its total length. Tubed lateral-line scales cycloid; lateral-line system well developed on both sides of body.

Dorsal fin originating slightly in front of anterior margin of upper eye and extending to base of caudal fin, with which it is only partially contiguous. Anal fin originating just posterior to pelvic fins, similar to dorsal fin in attachment to caudal fin. Caudal fin relatively long, extending beyond ends of posteriormost dorsal- and anal-fin rays. Dorsal- and anal-fin rays bifid distally. Pectoral fins broad-based, subequal, connected to branchiostegal membranes dorsally. Pelvic fins of equal size, free from anal fin; separate (not united) but connected proximally by skin.

*Color*.—After fixation in formalin and storage in ethanol, ocular side light greyish-brown, with 16–18 narrow, dark brown bands on body extending onto dorsal and anal fins; bands about as wide as interspaces between them, a few occurring in pairs (paratype); edges of bands darker than midsections. Pectoral fin of blind side dark brown, that of ocular side dusky. Proximal and distal areas of caudal fin dark brown. Pelvic fin of blind side darker than that of ocular side. Blind side of body generally white with scattered dots of pigmentation becoming dusky toward body margins. Dorsal and anal fins on blind side dark brown.

*Distribution*.—Known only from Lingayen Gulf, Luzon, Philippines.

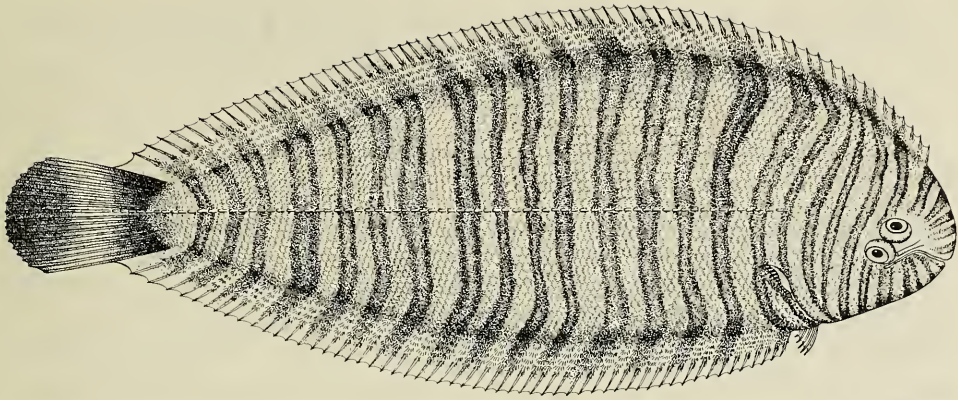


Fig. 1. *Zebrias lucapensis*, holotype, LACM 37436-6, 83.5 mm SL, vicinity of Hundred Islands, Lingayen Gulf, Luzon, Philippines.

*Etymology.*—The name *lucapensis* is an adjective designated in honor of the people of the coastal village of Lucap, Pangasinan Province, Philippines.

*Remarks.*—Of the 16 previously described, nominal species of *Zebrias*, *Z. lucapensis* most closely resembles *Z. crossolepis* Cheng and Chang from coastal China. *Zebrias lucapensis* may be distinguished from *Z. crossolepis* by number of bands on the body (16–18 mostly unpaired bands in *lucapensis*; 9 paired bands in *crossolepis*), size of the ocular-side pectoral fin (14–18% HL in *lucapensis*; 15.7–20.8 [ $X = 18.5\%$ ] HL in *crossolepis*), and by relative length of the spinulated portion of ocular-side body scales (33–40% of scale spinulated in *lucapensis*; 45–57% in *crossolepis*).

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